

**Notice of Allowability**

Application No.

09/902,491

Applicant(s)

RITZDORF ET AL.

Examiner

Zandra V. Smith

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 09 July 2001.
2. ☒ The allowed claim(s) is/are 1-72.
3. ☒ The drawings filed on 09 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

## **DETAILED ACTION**

### ***Preliminary Amendment***

The preliminary amendment filed 31 December 2003 has been entered.

### ***Allowable Subject Matter***

Claims 1-72 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record, taken alone or in combination, fails to disclose or render obvious, an apparatus for processing a microelectronic workpiece that includes, the combination of a metrology unit, a transport unit, a stripping unit, and a control unit coupled to the metrology unit and the transport unit or stripping unit, the control unit transmitting signals to direct the transport unit and influence a process carried out by the stripping unit based on a received condition signal, in combination with the rest of the limitations of claim 1.

Regarding claim 9, the prior art of record, taken alone or in combination, fails to disclose or render obvious, an apparatus for processing a microelectronic workpiece that includes, the combination of a metrology unit, a disposition unit, a transport unit, a dielectric shaping unit, and a control unit coupled to the metrology unit and the disposition unit or transport unit, the control unit transmitting signals to direct the transport unit and influence a process carried out by the disposition unit based on a received condition signal, in combination with the rest of the limitations of claim.

Regarding claims 19, 29, and 57, the prior art of record, taken alone or in combination, fails to disclose or render obvious, a system for processing a microelectronic workpiece that includes, the combination of a metrology unit, a disposition unit including a plurality of

Art Unit: 2877

concentric anodes disposed at different elevations in the principle flow chamber of the disposition unit, a transport unit, and a control unit coupled to the metrology unit and the disposition unit or transport unit, the control unit transmitting signals to direct the transport unit and influence a process carried out by the disposition unit based on a received condition signal in, combination with the rest of the limitations of the claims.

As to claims 30 and 63, the prior art of record, taken alone or in combination, fails to disclose or render obvious, a system for processing a microelectronic workpiece that includes, the combination of a metrology unit, a disposition, a transport unit, an annealing unit, and a control unit coupled to the metrology unit and the annealing unit or transport unit, the control unit transmitting signals to direct the transport unit and influence a process carried out by the annealing unit based on a received condition signal, in combination with the rest of the limitations of claims.

Regarding claims 42 and 51, the prior art of record, taken alone or in combination, fails to disclose or render obvious, a method for processing a microelectronic workpiece that includes, the combination of a control unit that, based on a condition signal from a metrology unit transmits a first condition signal to a transport unit and an second condition signal to a stripping unit and stripping a layered portion by introducing first and second process fluids to contact first and second sides, in combination with the rest of the limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

***Solomon et al. (5,900,633)*** discloses a spectrometric method for analysis of film thickness and composition of a patterned sample that includes thickness measurement of a wafer in a process system but fails to provide the combination of claimed components.

***Wang (5,948,203)*** discloses an optical dielectric thickness monitor for CMP monitoring that includes thickness measurement but fails to provide the combination of claimed components, including a dielectric field-shaping unit.

***Akimoto et al. (6,004,047)*** disclose a system for processing and evaluating a photoresist that includes a metrology unit that controls a system process based on a received condition signal but fails to provide the combination of claimed components.

***Labunsky et al. (6,132,289)*** disclose a system for film thickness measurement integrated into a wafer load/unload unit that includes a thickness measurement but fails to provide the combination of claimed components.

***Hanson (6,251,692)*** discloses a semiconductor processing workpiece support with sensory subsystem that includes receiving workpiece and processing and annealing the workpiece but fails to provide the combination of claimed components.

***Suzuki et al. (6,270,619)*** disclose a treatment device, laser annealing device, and manufacturing apparatus that includes forming a layer and annealing but fails to provide a metrology system that controls a system process based on a received condition signal.

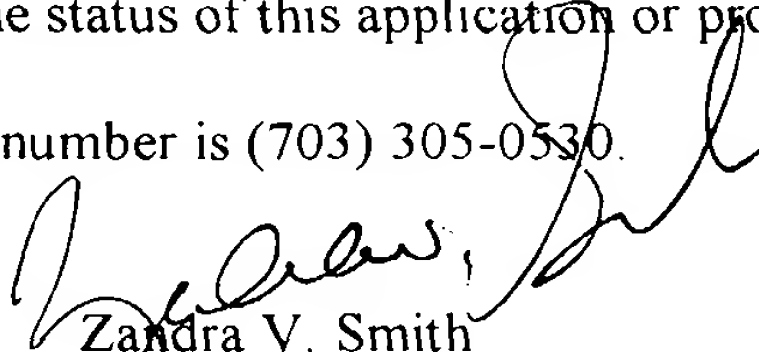
***Holzapfel et al. (5,872,633)*** disclose a system for detecting removal of thin film layers that includes a metrology system that controls a system process based on a received condition signal but fails to provide the claimed combination of components.

***Fax/Telephone Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zandra V. Smith whose telephone number is (703) 305-7776. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703)308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0530.



Zandra V. Smith  
Primary Examiner  
Art Unit 2877